

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>PA 54 PCT jg</b>	<b>FOR FURTHER ACTION</b>	
See Form PCT/IPEA/416		
International application No. <b>PCT/EP2004/007653</b>	International filing date ( <i>day/month/year</i> ) <b>12.07.2004</b>	Priority date ( <i>day/month/year</i> ) <b>26.07.2003</b>
International Patent Classification (IPC) or national classification and IPC <b>G01B5/28, G01B7/34</b>		
Applicant <b>CARL MAHR HOLDING GMBH</b>		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <b>8</b> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (<i>sent to the applicant and to the International Bureau</i>) a total of <b>2</b> sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table style="margin-left: 20px; border-collapse: collapse;"> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. I</td> <td>Basis of the report</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. II</td> <td>Priority</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. III</td> <td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. IV</td> <td>Lack of unity of invention</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. V</td> <td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VI</td> <td>Certain documents cited</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>Box No. VII</td> <td>Certain defects in the international application</td> </tr> <tr> <td><input type="checkbox"/></td> <td>Box No. VIII</td> <td>Certain observations on the international application</td> </tr> </table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application	<input type="checkbox"/>	Box No. VIII	Certain observations on the international application
<input checked="" type="checkbox"/>	Box No. I	Basis of the report																							
<input type="checkbox"/>	Box No. II	Priority																							
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability																							
<input type="checkbox"/>	Box No. IV	Lack of unity of invention																							
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement																							
<input type="checkbox"/>	Box No. VI	Certain documents cited																							
<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application																							
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application																							

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/007653

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- This report is based on translations from the original language into the following language \_\_\_\_\_ which is the language of a translation furnished for the purposes of:
- international search (Rule 12.3 and 23.1(b))
  - publication of the international application (Rule 12.4)
  - international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):
- the international application as originally filed/furnished
- the description:  
pages 1-11 as originally filed/furnished  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- the claims:  
nos. \_\_\_\_\_ as originally filed/furnished  
nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19  
nos.\* 1-9 received by this Authority on 20.04.2005 with letter  
nos.\* \_\_\_\_\_ received by this Authority on of 19.04.2005
- the drawings:  
sheets 1/5-5/5 as originally filed/furnished  
sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3.  The amendments have resulted in the cancellation of:
- the description, pages \_\_\_\_\_
  - the claims, nos. \_\_\_\_\_
  - the drawings, sheets/figs \_\_\_\_\_
  - the sequence listing (*specify*): \_\_\_\_\_
  - any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4.  This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- the description, pages \_\_\_\_\_
  - the claims, nos. 1 () \_\_\_\_\_
  - the drawings, sheets/figs \_\_\_\_\_
  - the sequence listing (*specify*): \_\_\_\_\_
  - any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/EP2004/007653

**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

## 1. Statement

Novelty (N)	Claims	6-9	YES
	Claims	1-5	NO
Inventive step (IS)	Claims	_____	YES
	Claims	6-9	NO
Industrial applicability (IA)	Claims	1-9	YES
	Claims	_____	NO

## 2. Citations and explanations (Rule 70.7)

Reference is made to the following documents:

- D1: US-A-3 501 841  
 D2: US-6 594 532 B2  
 D3: DE 198 17 406 C  
 D4: US-A-3 505 861.

1. Technical field: measurement of surface roughness

2. Prior art

Documents **D1 to D3** disclose roughness testers having sensor tips, feed devices and a reference profile. Document **D4** discloses a two-dimensional roughness test standard. In document **D3** a runner is passed over the reference profile. Document **D2** uses a spherical test standard. Document **D1** is considered the closest prior art (see point 3 for details).

3. Novelty (PCT Article 33(2))

The subject matter of **claims 1-5** is not novel.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/007653

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
-----------	---

Document D1 (figures 1-4; column 3, line 70, to column 7, line 45) discloses a roughness measurement device having a roughness sensor 26. The roughness sensor has a sensor tip 46 and an electromagnetic transducer 50-53 which controls a recorder. The unit delimited by its housing 24 can be considered a "receiving device". On the inside this unit has a "recess" (the interior space) for the adjustable (along the rails 25 and 27) reception of a part 30, referred to as a "sleeve". Part 30 is a "feed device" since it displaced the sensor 26 along the rails 25 and 27 over the workpiece 16. The device further has a thick glass plate (a cuboid "plastics" body) having an optically level reference surface 29. This body is the "test standard of fixed roughness" (the roughness remains unchanged" which is "disposed on the receiving device" and even "disposed in the recess".

4. Inventive step (PCT Article 33(3))

Dependent claim 6 merely defines a routine embodiment of a test standard obvious to a person skilled in the art. Dependent claims 7-9 concern only minor routine modifications which a person skilled in the art would make on the basis of familiar considerations, especially since the resulting advantages are readily foreseeable. Consequently, the subject matter of **claims 6-9** does not involve an inventive step.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/007653

Box No. V      **Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

5. Industrial applicability (PCT Article 33(4))

The subject matter of **claims 1-9** is industrially applicable, for example for measuring workpieces during quality control.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/EP2004/007653

Box No. VII      Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Contrary to PCT Rule 5.1(a)(ii), the description does not cite document **D1** or indicate the relevant prior art disclosed therein.

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of:

Box I.

- 1.1 Following receipt of the **written opinion of the International Searching Authority**, the applicant submitted amended claims with the letter of 1 April 2005. Together with the demand for **international preliminary examination** of 19 April 2005 this letter containing the amended claims was resubmitted as "amendments under Article 19". However, the newly submitted claims go beyond the disclosure in the original application, and hence the **requirements of PCT Article 34(2)(b)** are not satisfied.
- 1.2 There is no basis for the assertion that in a (first) position of the feed device the roughness sensor is held in a measurement position and in a further (second) position of the feed device it is held in a calibration position.
- 1.3 Neither the passage cited by the applicant (page 9, paragraphs 2 and 3) nor any other passages in the application concerns a "measurement position" or a "calibration position" or assigns these "positions" to the roughness sensor. Moreover, the terms "measurement and calibration position" are vague and unclear (**PCT Article 6**).
- 1.4 **Consequently, pursuant to PCT Rule 70.2(c), the international preliminary examination report was**

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/007653

## Supplemental Box

**established without taking into consideration the above amendments.** The applicant's attention is further drawn to the fact that the amendments (if permitted) would still not be suitable for delimitation with respect to document D1 (novelty): in document **D1**, given the nature of the surface of the test standard, this standard is clearly designed "for testing the calibration". Furthermore, document **D1** clearly contains a "calibration position" and a "measurement position". For example, the starting point and end point of the feed movement can readily be referred to as the above positions.